

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

1. (Currently Amended) A method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:
selecting, by a user, any of the attributes in accordance with the user's preferences;
creating the tree in accordance with the selected attributes; and
automatically monitoring the plurality of objects for determining changes to the objects or their attributes, and updating the tree based on those changes to the objects or the attributes.
2. (Original) A method according to Claim 1, further comprising the step of displaying the tree.
3. (Original) A method according to Claim 2, wherein when one of the tree nodes is selected by the user, all of the objects associated with at least that node are also displayed.
4. (Original) A method according to Claim 1, further comprising the step of associating a new object with one of the tree nodes.

5. (Original) A method according to Claim 1, further comprising the step of associating a modified object with one of the tree nodes.

6. (Original) A method according to Claim 1, wherein a node is added to the tree when an object requiring that node has been added or modified.

7. (Original) A method according to Claim 1, wherein a node is deleted when objects requiring that node no longer exist.

8. (Original) A method according to Claim 1, wherein the user selects a node to operate upon the objects associated with the selected node.

9. (Currently Amended) A method according to Claim 1 [8], wherein the user simultaneously selects two or more nodes to operate upon or display all objects associated with the selected nodes.

10. (Currently Amended) A method according to Claim 1, wherein one or more of the attributes may be inherent are calculated or derived from other attributes.

11. (Currently Amended) A method displaying a plurality of objects of a tree having a plurality of nodes, said method comprising the steps of:
 associating the plurality of objects with the node, each object having a plurality of attributes, wherein the objects associated with any one of the nodes is a superset of objects associated with lower nodes; and

applying a an attribute filter to each lower node in successive fashion so that only those objects contained in a higher node that have an attribute matching the node attribute are displayed.

12. (Currently Amended) A computer system for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said system comprising:

a selection unit for selecting, by a user, any of the attributes in accordance with the user's preferences;

a creating unit for creating the tree in accordance with the selected attributes; and

an updating unit for automatically monitoring the plurality of objects for determining changes to the objects or their attributes, and updating the tree based on those changes to the objects or the attributes.

13. (Previously Presented) A system according to Claim 12, further comprising a display unit for displaying the tree.

14. (Previously Presented) A system according to Claim 13, wherein when one of the tree nodes is selected by the user, all of the objects associated with at least that node are also displayed.

15. (Previously Presented) A system according to Claim 12, further comprising an associating unit for associating a new object with one of the tree nodes.

16. (Previously Presented) A system according to Claim 12, further comprising an associating unit for associating a modified object with one of the tree nodes.

17. (Previously Presented) A system according to Claim 12, wherein a node is added to the tree when an object requiring that node has been added or modified.

18. (Previously Presented) A system according to Claim 12, wherein a node is deleted when objects requiring that node no longer exist.

19. (Previously Presented) A system according to Claim 12, wherein the user selects a node to operate upon the objects associated with the selected node.

20. (Currently Amended) A system according to Claim 12 [18], wherein the user simultaneously selects two or more nodes to operate upon or display all objects associated with the selected nodes.

21. (Currently Amended) A system according to Claim 12, wherein one or more of the attributes may be inherent are calculated or derived from other attributes.

22. (Currently Amended) A computer system for displaying a plurality of objects of a tree having a plurality of nodes, said system comprising:

an associating unit for associating the plurality of objects with the node, each object having a plurality of attributes, wherein the objects associated with any one of the nodes is a superset of objects associated with lower nodes; and

an application unit for applying a an attribute filter to each lower node, the application being applied in successive fashion so that only those objects contained in a higher node that have an attribute matching the node attribute are displayed.

23. (Currently Amended) A computer-readable storage medium storing an executable program code for causing execution of a method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences;

creating the tree in accordance with the selected attributes; and
automatically monitoring the plurality of objects for determining changes to the objects or their attributes, and updating the tree based on those changes to the objects or the attributes.

24. (Previously Presented) A storage medium according to Claim 23, said method further comprising the step of displaying the tree.

25. (Previously Presented) A storage medium according to Claim 24, wherein when one of the tree nodes is selected by the user, all of the objects associated with at least that node are also displayed.

26. (Previously Presented) A storage medium according to Claim 23, said method further comprising the step of associating a new object with one of the tree nodes.

27. (Previously Presented) A storage medium according to Claim 23, said method further comprising the step of associating a modified object with one of the tree nodes.

28. (Previously Presented) A storage medium according to Claim 23, wherein a node is added to the tree when an object requiring that node has been added or modified.

29. (Previously Presented) A storage medium according to Claim 23, wherein a node is deleted when objects requiring that node no longer exist.

30. (Previously Presented) A storage medium according to Claim 23, wherein the user selects a node to operate upon the objects associated with the selected node.

31. (Currently Amended) A storage medium according to Claim 23 [30], wherein the user simultaneously selects two or more nodes to operate upon or display all objects associated with the selected nodes.

32. (Currently Amended) A storage medium according to Claim 23, wherein one ore more of the attributes may be inherent are calculated or derived from other attributes.

33. (Currently Amended) A computer-readable storage medium storing an executable program code for causing execution of a method for creating a tree having a

plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:

associating the plurality of objects with the node, each object having a plurality of attributes, wherein the objects associated with any one of the nodes is a superset of objects associated with lower nodes; and

applying a an attribute filter to each lower node in successive fashion so that only those objects contained in a higher node that have an attribute matching the node attribute are displayed.

34. (New) A method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences, wherein the set of available attributes available for selection is not pre-defined;

creating the tree in accordance with the selected attributes; and
automatically updating the tree based on changes to the objects or the attributes.

35. (New) A method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences;

creating the tree in accordance with the selected attributes; and

automatically updating the tree based on changes to the objects or the attributes, wherein the user simultaneously selects two or more nodes to operate upon or display all objects associated with the selected nodes.

36. (New) A method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences, wherein one or more of the attributes are calculated or derived from other attributes;

creating the tree in accordance with the selected attributes; and
automatically updating the tree based on changes to the objects or the attributes.

37. (New) A method for creating a dynamic tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes and each attribute having a value, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences;

creating the tree in accordance with the selected attributes and their respective values; and

automatically updating the tree based on changes to one or more of the attribute values.

38. (New) A computer system for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said system comprising:

a selection unit for selecting, by a user, any of the attributes in accordance with the user's preferences, wherein the set of available attributes available for selection is not pre-defined;

a creating unit for creating the tree in accordance with the selected attributes; and

an updating unit for automatically updating the tree based on changes to the objects or the attributes.

39. (New) A computer system for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said system comprising:

a selection unit for selecting, by a user, any of the attributes in accordance with the user's preferences;

a creating unit for creating the tree in accordance with the selected attributes; and

an updating unit for automatically updating the tree based on changes to the objects or the attributes, wherein the user simultaneously selects two or more nodes to operate upon or display all objects associated with the selected nodes.

40. (New) A computer system for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said system comprising:

a selection unit for selecting, by a user, any of the attributes in accordance with the user's preferences, wherein one or more of the attributes are calculated or derived from other attributes;

a creating unit for creating the tree in accordance with the selected attributes; and

an updating unit for automatically updating the tree based on changes to the objects or the attributes.

41. (New) A computer system for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes and each attribute having a value, said system comprising:

a selection unit for selecting, by a user, any of the attributes in accordance with the user's preferences;

a creating unit for creating the tree in accordance with the selected attributes and their respective values; and

an updating unit for automatically updating the tree based on changes to one or more of the attribute values.

42. (New) A computer-readable storage medium storing an executable program code for causing execution of a method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences, wherein the set of available attributes available for selection is not pre-defined;

creating the tree in accordance with the selected attributes; and

automatically updating the tree based on changes to the objects or the attributes.

43. (New) A computer-readable storage medium storing an executable program code for causing execution of a method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences;

creating the tree in accordance with the selected attributes; and

automatically updating the tree based on changes to the objects or the attributes, wherein the user simultaneously selects two or more nodes to operate upon or display all objects associated with the selected nodes.

44. (New) A computer-readable storage medium storing an executable program code for causing execution of a method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences, wherein one ore more of the attributes are calculated or derived from other attributes;

creating the tree in accordance with the selected attributes; and

automatically updating the tree based on changes to the objects or the attributes.

45. (New) A computer-readable storage medium storing an executable program code for causing execution of a method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of attributes and each attribute having a value, said method comprising the steps of:

selecting, by a user, any of the attributes in accordance with the user's preferences;

creating the tree in accordance with the selected attributes and their respective values; and

automatically updating the tree based on changes to one or more of the attribute values.

46. (New) A method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of intrinsic and derived attributes, said method comprising the steps of:

selecting, by a user, any of the intrinsic and derived attributes in accordance with the user's preferences;

creating the tree in accordance with the selected attributes and the values assigned to these attributes, within a universe of objects, wherein the tree requires the least number of nodes to represent all objects in the universe; and

automatically monitoring the objects to determine changes to the objects or their attributes and updating the tree based on those changes to ensure that the tree requires the least number of nodes to represent all objects in the universe.

47. (New) A computer system for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of intrinsic and derived attributes, said system comprising:

a selection unit for selecting, by a user, any of the intrinsic and derived attributes in accordance with the user's preferences;

a creating unit for creating the tree in accordance with the selected attributes and the values assigned to these attributes, within a universe of objects, wherein the tree requires the least number of nodes to represent all objects in the universe; and

an updating unit for automatically monitoring the objects to determine changes to the objects or their attributes and updating the tree based on those changes to ensure that the tree requires the least number of nodes to represent all objects in the universe.

48. (New) A computer-readable storage medium storing an executable program code for causing execution of a method for creating a tree having a plurality of nodes and a plurality of objects associated therewith, each object having a plurality of intrinsic and derived attributes, said method comprising the steps of:

selecting, by a user, any of the intrinsic and derived attributes in accordance with the user's preferences;

creating the tree in accordance with the selected attributes and the values assigned to these attributes, within a universe of objects, wherein the tree requires the least number of nodes to represent all objects in the universe; and

automatically monitoring the objects to determine changes to the objects or their attributes and updating the tree based on those changes to ensure that the tree requires the least number of nodes to represent all objects in the universe.